

CLAIMS

1. A method of treating a natural soft skeletal tissue injury in a patient the method comprising administering to the patient a composition of mesenchymal stem cells in liquid suspension enriched compared to the natural source of said cells, or tenocytes derived therefrom.
2. A method according to Claim 1 wherein the injury is strain induced.
3. A method according to Claim 1 or 2 wherein the composition of mesenchymal stem cells or tenocytes is administered at the site of tissue injury.
4. A method according to any one of Claims 1 to 3 wherein the soft skeletal tissue is a tendon or ligament.
5. A method according to any one of the preceding claims wherein the patient is a mammal.
6. A method according to Claim 5 wherein the mammal is a human or a non-human mammal of economic importance.
7. A method according to Claim 6 wherein the non-human mammal is selected from the group consisting of horses, dogs and camels.
8. A method according to any one of the preceding claims wherein the patient is a horse.
9. A method according to any one of Claims 1 to 7 wherein the patient is a horse or a camel and the soft skeletal tissue is selected from the

group consisting of superficial digital flexor tendon (SDFT), suspensory ligament, deep digital flexor tendon, meniscus, cruciate ligament, and accessory ligament of the deep digital flexor tendon.

- 5 10. A method according to any one of Claims 1 to 7 wherein the patient is a dog and the soft skeletal tissue is selected from the group consisting of Achilles tendon, cruciate ligament, meniscus, flexor tendon and intervertebral disc.
- 10 11. A method according to any one of Claims 1 to 5 wherein the patient is a human and the soft skeletal tissue is selected from the group consisting of Achilles tendon, quadriceps tendon, rotator cuff, medial and lateral epicondylitis, cruciate ligament, meniscus and intervertebral disc.
- 15 12. A method according to any one of the preceding claims wherein the mesenchymal stem cells or tenocytes are allogenic.
13. A method according to Claim 12 wherein the mesenchymal stem
20 cells or tenocytes are autologous.
14. A method according to Claim 13 wherein the mesenchymal stem cells are derived from the bone marrow of the patient.
- 25 15. A method according to Claim 13 wherein the mesenchymal stem cells are derived from umbilical cord blood previously recovered from the patient.

16. A method according to any one of the preceding claims wherein the liquid suspension of mesenchymal stem cells or tenocytes is injected.
- 5 17. A method according to any one of the preceding claims wherein biological signals which encourage the mesenchymal stem cells to form tenocytes are also administered to the patient.
- 10 18. Use of a composition of mesenchymal stem cells in liquid suspension enriched compared to the natural source of said cells, or tenocytes derived therefrom, in the manufacture of a medicament for treating a natural soft skeletal tissue injury in a patient.
- 15 19. A kit of parts comprising (1) a composition of mesenchymal stem cells in liquid suspension enriched compared to the natural source of said cells, or tenocytes derived therefrom, (2) means for delivering the liquid suspension of stem cells to a site of natural soft skeletal tissue injury in a patient and (3) means for determining that the means for delivering locate to the site of injury.
- 20 20. A method according to any one of claims 1 to 17 wherein the site of injury is cleansed of damaged tissue and any early repair scar tissue starting to form at the site before administration of the composition of mesenchymal stem cells or tenocytes.